



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: CA1163

Peter R. BEETHAM, et al.

Appln. No.:09/685,403

Group Art Unit: 1638

Confirmation No.: 4644

Examiner: KRUSE, David H.

Filed: October 10, 2000

For: NON-TRANSGENIC HERBICIDE RESISTANT PLANTS

SUBMISSION OF FORMAL DRAWINGS

Official Draftsperson
Commissioner for Patents
Washington, D.C. 20231

Sir:

Submitted herewith please find 8 sheet(s) of formal drawings. The Examiner is respectfully requested to acknowledge receipt of these formal drawings.

The submitted drawings incorporate the proposed drawing changes approved in the Office Action mailed 11 September 2002 and are believed to obviate the informalities indicated on Form PTO-948 attached to that Office Action. As requested Fig 3A-3F and Fig. 4A and 4B were relabeled with letter designations.

Respectfully submitted,

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Registration No. 30,126

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Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope of the following dimensions:

Signed

March 11, 2003

John M. Sanders 30,126

Sheet 4 of 14

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Title: NON-TRANSGENIC HERBICIDE RESISTANT PLANTS

Inventor(s): Peter BLETHAM et al.

Application No: 09 685,403

Sheet 5 of 14

Section 5

285) 285 290 300 310 320 330 340 355
(276) TATTAGGCTTCCGGCTCCAGTCTCTATCAAAATCGGATCTGCTTCTCGGCTCTGTCTGAGGGAACAA
(264) CATTAAGGAAACCGGATCCAAATCTCTCTCAATCGGATCTCTCTGCTTGGCCCTCTATCTGAGGGAACAA
(264) TGTAAATGGCTCTAAATCAATATTAATAGAAATCTCTCTTCTTGGCTGCTTATCTGAAGGAACAA
(57) GCTGCCGGGTCCAAGTCGCTTTCCAAACCGGATCCTCCTACTCGCCGCCCTGTCCGAGGGGACAAACAGTGG
(285) TATTAAAGCTGCTGCTCCAAATCTCTCTC AATCGGATCCTCTTCTTGTCTCTGTCTGAGGGAACAA

Section 6

356 370 380 390 400 410 426
(347) CTGTAGTGGACACAGCTTGTGAATAGCGGATGACATCAATTAACAAGGCTTGAAGAGATTGGGACTT
(335) CTGTAGTGGACACAGCTTGTGAATAGCGGATGACATCAATTAACAAGGCTTGAAGAGATTGGGACTT
(335) CTGTAGTGGACACAGCTTGTGAATAGCGGATGACATCAATTAACAAGGCTTGAAGAGATTGGGACTT
(128) TTGATAACCTGCTGAACAGTGGGATGTCACATAGCTCGGGCCCTTGAGGACTCTTGGTCTCTCTGTC
(356) CTGTAGTGGACAACTTGTGAATAGTGTGATGACATCAATTAACAAGGCTTGAAGAGACTGGGACTT

Section 7

427 440 450 460 470 480 497
(418) AATGTGGAAACGCTGCTGTAAGTGAAGGAGTGGCGGCTATATCCAGCTTCCAT
(406) AACGCGGACCGCTGCTGTAAGTGAAGGAGTGGCGGCTATATCCAGCTTCCAT
(406) CATGTAGAGAGAGCTGCTGTAAGTGAAGGAGTGGCGGCTATATCCAGCTTCCAT
(199) GAAGCGGACAAAGCTGCTGTAAGTGAAGGAGTGGCGGCTATATCCAGCTTCCAT
(427) AATGTGGAAATGATAGTGAAGGAGTGGCGGCTATATCCAGCTTCCAT

Section 8

498 510 520 530 540 550 568
(489) AGATTAAGAAACAGGATATCGAACTTTACCTCGGTAAGCAGAAAGGCTTCACTTCCGGTCCGG
(477) AGATTAAGAAACAGGATATCGAACTTTACCTCGGTAAGCAGAAAGGCTTCACTTCCGGTCCGG
(477) AGATTAAGAAACAGGATATCGAACTTTACCTCGGTAAGCAGAAAGGCTTCACTTCCGGTCCGG
(267) TAAAGAGGAAATGACAGCTCTCTCTGCGGAAAGCTGGAACCTGCAATGCGGCCATTGACAGCAGCTGTTACTG
(498) AGATTCCAAGGGTGATATTGAATTGTACCTTGGTAATGACAGGAAACAGCAATGCGTCCACTAACCCGCTGCAG

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Title : NON-TRANSGENIC HERBICIDE RESISTANT PLANTS

Inventor(s): Peter BEETHAM et al.

Application No: 09 685,403

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	Section 9										
	569	580	590	600	610	620				639	
atepspscl	TTACAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	
bnepsc	TTACAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	
petaroac	TTACAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	
zmepr	TTACAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	
Cor	TTACAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	TTGAGG	
	Section 10										
	640	650	660	670	680	690	700	710			
atepspscl	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	
bnepsc	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	
petaroac	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	
zmepr	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	
Cor	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	GATTG	
	Section 11										
	711	720	730	740	750	760	770	781			
atepspscl	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	
bnepsc	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	
petaroac	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	
zmepr	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	
Cor	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	TCGTG	
	Section 12										
	782	790	800	810	820	830	840	852			
atepspscl	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	
bnepsc	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	
petaroac	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	
zmepr	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	
Cor	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	TGACT	

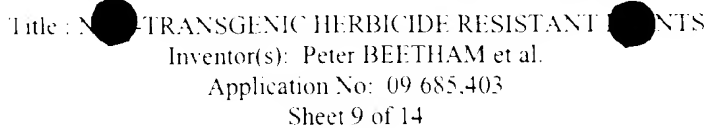


	Section 13										
	853	854	855	856	857	858	859	860	861	862	
853)	853	854	855	856	857	858	859	860	861	862	
844)	853	854	855	856	857	858	859	860	861	862	
832)	853	854	855	856	857	858	859	860	861	862	
832)	853	854	855	856	857	858	859	860	861	862	
832)	853	854	855	856	857	858	859	860	861	862	
622)	853	854	855	856	857	858	859	860	861	862	
853)	853	854	855	856	857	858	859	860	861	862	
	Section 14										
924)	924	925	926	927	928	929	930	931	932	933	
915)	924	925	926	927	928	929	930	931	932	933	
903)	924	925	926	927	928	929	930	931	932	933	
903)	924	925	926	927	928	929	930	931	932	933	
693)	924	925	926	927	928	929	930	931	932	933	
924)	924	925	926	927	928	929	930	931	932	933	
	Section 15										
995)	995	996	997	998	999	1000	1001	1002	1003	1004	
986)	995	996	997	998	999	1000	1001	1002	1003	1004	
974)	995	996	997	998	999	1000	1001	1002	1003	1004	
974)	995	996	997	998	999	1000	1001	1002	1003	1004	
764)	995	996	997	998	999	1000	1001	1002	1003	1004	
995)	995	996	997	998	999	1000	1001	1002	1003	1004	
	Section 16										
1066)	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	
1057)	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	
1045)	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	
1045)	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	
835)	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	
1066)	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	

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	1563	1563	1572
atp5pscc	1563)	AAAGCCTCTAA	
bnpscc	1542)	AAAGCATTTAA	
petaracc	1542)	CAAGCATTTAA	
zmercc	1332)	TTAA-----	
Co	1563)	AAAGCATTTAA	



Title: TRANSGENIC HERBICIDE RESISTANT PLANTS

Inventor(s): Peter BEETHAM et al.

Application No: 09 685.403

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Section 1									
	1	10	20	30	40	50	60	74	
atepsps	1	MAQSRICNGVQNP-S	IISNLSKSSQ	RKSP	SVSLKTQ	QHPRAYPI	SSSWGLK	KGSM	TLIGS
bnepsps	2	MAQSRICNGVQNP	CV	IISNLSKSSQ	RKSP	SVSLKTQ	QHPRAYPI	SSSWGLK	KGSM
petaroa	3	MAQSRICNGVQNP	CV	IISNLSKSSQ	RKSP	SVSLKTQ	QHPRAYPI	SSSWGLK	KGSM
zmepsps	4	MAQSRICNGVQNP	CV	IISNLSKSSQ	RKSP	SVSLKTQ	QHPRAYPI	SSSWGLK	KGSM
Cons	5	MAQSRICNGVQNP	CV	IISNLSKSSQ	RKSP	SVSLKTQ	QHPRAYPI	SSSWGLK	KGSM
Section 2									
atepsps	75	75	80	90	100	110	120	130	148
bnepsps	76	VMSSVSTA	EKASEI	VLQPI	REISGL	KLPGSK	SLSNR	ILL	LAAL
petaroa	77	VMSSVSTA	EKASEI	VLQPI	REISGL	KLPGSK	SLSNR	ILL	LAAL
zmepsps	78	VMSSVSTA	EKASEI	VLQPI	REISGL	KLPGSK	SLSNR	ILL	LAAL
Cons	79	VMSSVSTA	EKASEI	VLQPI	REISGL	KLPGSK	SLSNR	ILL	LAAL
Section 3									
atepsps	149	149	160	170	180	190	200	210	222
bnepsps	150	ETDSENNR	AVVEG	CGGIF	PAS	EDSKSD	IEL	VLGN	AGTAM
petaroa	151	ETDSENNR	AVVEG	CGGIF	PAS	EDSKSD	IEL	VLGN	AGTAM
zmepsps	152	ETDSENNR	AVVEG	CGGIF	PAS	EDSKSD	IEL	VLGN	AGTAM
Cons	153	ETDSENNR	AVVEG	CGGIF	PAS	EDSKSD	IEL	VLGN	AGTAM
Section 4									
atepsps	223	223	230	240	250	260	270	280	296
bnepsps	224	LKQLGADV	EC	MLGTNC	PPVRVN	ANGGLP	GGKVK	LSGSI	SSQYLT
petaroa	225	LKQLGADV	EC	MLGTNC	PPVRVN	ANGGLP	GGKVK	LSGSI	SSQYLT
zmepsps	226	LKQLGADV	EC	MLGTNC	PPVRVN	ANGGLP	GGKVK	LSGSI	SSQYLT
Cons	227	LKQLGADV	EC	MLGTNC	PPVRVN	ANGGLP	GGKVK	LSGSI	SSQYLT

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Title: TRANSGENIC HERBICIDE RESISTANT

Inventor(s): Peter BEETHAM et al.

Application No: 09 685,403

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Section 5

297 310 320 330 340 350 360 370
1) LKLMERFGVSVTEHSDSDSWDRFFVVKGGQKYKSPGNAYVEGDASSACYFLAGAAITGETVTVEGCGTTSLQGDVKFA
2) LKLMERFGVSAEHSDDSWDRFFVVKGGQKYKSPGNAYVEGDASSACYFLAGAAITGETVTVEGCGTTSLQGDVKFA
3) LKLMERFGVSEHSSSDSWDRFFVVKGGQKYKSPGNAYVEGDASSACYFLAGAAITGETVTVEGCGTTSLQGDVKFA
4) LKLMERFGVKAESDSDSWDRFFVVKGGQKYKSPGNAYVEGDASSACYFLAGAAITGETVTVEGCGTTSLQGDVKFA
5) LKLMERFGVSEHSDSDSWDRFFVVKGGQKYKSPGNAYVEGDASSACYFLAGAAITGETVTVEGCGTTSLQGDVKFA

Section 6

371 380 390 400 410 420 430 444
1) EVLEKMGCKVSWTENS SVTVTGPPRDAFGMRHLRAIDVNMNKMPPDVAMTLAVVALFADGPTTIRDVASWRVKETE
2) EVLEKMGCKVSWTENS SVTVTGPPRDAFGMRHLRAIDVNMNKMPPDVAMTLAVVALFADGPTTIRDVASWRVKETE
3) EVLEKMGAEVSWTENS SVTVKGPPRS SGGRKHLRAIDVNMNKMPPDVAMTLAVVALFADGPTTIRDVASWRVKETE
4) EVLEMMGAKVSWTETS SVTVTGPPRDPFGGRKHLRAIDVNMNKMPPDVAMTLAVVALFADGPTTIRDVASWRVKETE
5) EVLEKMGCKVSWTENS SVTVTGPPRDAFGMRHLRAIDVNMNKMPPDVAMTLAVVALFADGPTTIRDVASWRVKETE

Section 7

445 450 460 470 480 490 500 518
1) RMIAICTELRKLGLGATVEEGSDYCIITPPKKMKTAETIDTYDDHRMAMAFSLAACADVPVTINDSGCTRKTFPDYF
2) RMIAICTELRKLGLGATVEEGSDYCIITPPKKMKTAETIDTYDDHRMAMAFSLAACADVPVTINDSGCTRKTFPDYF
3) RMIAICTELRKLGLGATVEEGSDYCIITPPKKMKTAETIDTYDDHRMAMAFSLAACADVPVTINDSGCTRKTFPDYF
4) RMIAICTELRKLGLGATVEEGSDYCIITPPKKMKTAETIDTYDDHRMAMAFSLAACADVPVTINDSGCTRKTFPDYF
5) RMIAICTELRKLGLGATVEEGSDYCIITPPKKMKTAETIDTYDDHRMAMAFSLAACADVPVTINDSGCTRKTFPDYF
6) RMIAICTELRKLGLGATVEEGSDYCIITPPKKMKTAETIDTYDDHRMAMAFSLAACADVPVTINDSGCTRKTFPDYF

Section 8

519 527
1) 5VLERITKH
2) 5VLESITKH
3) 5VLESIITKH
4) 5VLESIITKH
5) 5VLESIITKH
6) 5VLESIITKH

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